AMENDMENTS TO THE SPECIFCATION

Please amend the specification as follows.

Please replace the paragraph appearing at column 12, lines 30-45, with the following amended paragraph:

The partition wall 8 intervening between the reforming reaction unit 2 and both of the shift reaction unit 3 and the CO oxidizing unit 4 has a capability of self-adjusting thermal conduction, that is, a capability of transmitting a controlled quantity of heats from the reforming reaction unit 2 to the shift reaction unit 3 and the CO oxidizing unit 4, without allowing the after-heat from the reforming reaction unit 2 to remain excessively high before it is transmitted to the shift reaction unit 3 and the CO oxidizing unit 4, so that the shift reaction unit 3 and the CO oxidizing unit 4 can be heated to the respective reaction temperatures. The partition wall [5] <u>8</u> having such a thermal conductivity self-adjusting capability may be in the form of, for example, any known adiabatic layer or a hollow layer and, by suitably adjusting the material and the thickness thereof, an optimum thermal conduction adjusting effect can be obtained.

Please replace the paragraph appearing at column 12, line 45 to column 13, line 10, with the following amended paragraph:

Since the reforming apparatus comprises a coaxial arrangement of the combustion chamber 1, the reforming reaction unit 2 and both of the shift reaction unit 3 and the CO oxidizing unit 4 with the combustion chamber 1 inside the reforming reaction unit 2, the reforming system for providing the reformed gas with the CO content

removed can be assembled compact. Also, since heat from the combustion chamber 1 is consumed by the reforming reaction unit 2 in which the steam reforming reaction which is the endothermic reaction under the elevated temperatures takes place, after-heat of which is transmitted indirectly to both of the shift reaction unit 2 and the CO oxidizing unit 4 and, since the heat from the combustion chamber 1 can thus be utilized effectively by the reforming reaction unit 2, the shift reaction unit 3 and the CO oxidizing unit 4, the loss of heat can be minimized advantageously. In particular, since the reforming reaction unit 2 and both of the shift reaction unit 3 and the CO oxidizing unit 4 are coaxial with each other, they can be arranged in equilibrium relatively to the combustion chamber 1, serving as the heat source, without being biased even slightly relative to the combustion chamber 1 and, consequently, any possible variation in temperature within the same reaction unit can advantageously minimized. In addition, heat conducted from the reforming reaction unit 2 is, after the temperature thereof has been adjusted by the partition wall [5] 8 to the proper value, transmitted to the shift reaction unit 3 and the CO oxidizing unit 4 within which the respective reactions take place at a temperature lower than that in the reforming reaction unit 2 and, therefore, the respective reaction within the shift reaction unit 3 and the CO oxidizing unit 4 can take place at the properly controlled temperatures.

Please replace the paragraph appearing at column 13, line 63 to column 14, lines 15, with the following amended paragraph:

The reforming apparatus according to a [third] <u>fourth</u> preferred embodiment will be described. This reforming apparatus is of a structure, as shown in FIG. 4, in which the reforming reaction unit 2, the shift reaction unit 3, the CO reaction unit 4 and the raw material supply path 6 are arranged in an [upside-own] <u>upside-down</u> manner of the third embodiment That is, the shift reaction unit 3 is arranged on an outer peripheral side of the lower part of the reforming reaction unit 2 while the CO reaction unit 4 is arranged on an outer peripheral side of the upper part of the reforming reaction unit 2. The raw material supply path 6 interposed in the partition wall 8 is running from the lower side thereof to the upper side thereof and connected to the upper end of the reforming reaction unit 2. Therefore, in the same manner as the third embodiment, the raw material supply path 6 can be preheated by heat of the reforming reaction unit 2. Further in the same manner as the second embodiment, the shift reaction unit 3 and the CO oxidation unit 4 are arranged in conformity to the temperature distribution of the reforming reaction unit 2. Accordingly, a better temperature control can be obtained in each of the units.

Please replace the paragraph appearing at column 14, lines 42-56, with the following amended paragraph:

The reforming apparatus according to a [sixth] <u>seventh</u> preferred embodiment will be described. This reforming apparatus is of a structure, as shown in FIG. 7, in which in the first embodiment, the reforming reaction unit 2, the shift reaction unit 3 and the CO oxidation unit 4 are arranged in an [upside-own] <u>upside-down</u> manner and an introduction part of the raw material supply path 6 is arranged in a coil pattern and positioned at the upper side of the combustion chamber 1 while an exit end of the raw material supply path 6 is connected to the upper side of the reforming reaction unit 2. The structure is sufficient to preheat the raw material supply path 6 by the exhaust gas heat of the combustion chamber 1, so that utilization of extra heat from the combustion chamber for preheating the raw material supply path 6 realizes effective use of heat source and decreases heat loss.